Claims

1. Fluorocarbon emulsion for medicinal purposes, which includes rapidly eliminated fluorocarbon compounds such as perfluordecaline or perfluorooctylbromide, a fluorocarbon supplement and a phospholipid,
characterised in that
a composition of perfluorodecaline and perfluorooctylbromide is used as rapidly eliminated component, in which the fluorocarbon supplement represents a mixture of perfluorinated tertiary amines, and the phospholipid is used as a dispersion in a water-salt medium.

2. Emulsion according to claim 1,
characterised in that
it contains 2 – 40% by vol. fluorocarbon compounds.

3. Emulsion according to claim 1,
characterised in that
the composition of rapidly eliminated fluorocarbon compounds contains perfluorodecaline and perfluorooctylbromide in the ratio between 10 : 1 and 1 : 10.

4. Emulsion according to claim 1,
characterised in that
the fluorocarbon supplement contains 1 to 50% of the total content of the composition of rapidly eliminated fluorocarbon compounds.

5. Emulsion according to claim 1,
characterised in that
the mixture of perfluorinated tertiary amines contains a mixture of perfluorotripropylamine and coproducts thereof, namely cis-

und trans-isomers of perfluoro-1-propyl-3,4-dimethylpyrrolidone and perfluoro-1-propyl-4-methylpiperidine.

6. Emulsion according to claim 1 and 5,
characterised in that
the mixture of perfluorinated tertiary amines contains in addition perfluoro-N-methylcyclohexylpiperidine and coproducts thereof.

7. Emulsion according to claim 1,
characterised in that it contains a phospholipid dispersion in the water-salt medium in a concentration of 0.2 to 5% by weight.

8. Emulsion according to claim 1,
characterised in that
the phospholipid dispersion in the water-salt medium contains egg or soya phospholipids or a mixture of these lipids.

9. Emulsion according to claim 1,
characterised in that
the phospholipid dispersion in the water-salt medium contains as adjuvant vegetable oil in a quantity of 1 - 15% of the total content of the phospholipids.

10. Emulsion according to claim 9,
characterised in that
soya oil serves as adjuvant.

11. Emulsion according to claim 9,
characterised in that
sunflower seed oil serves as adjuvant.

12. Emulsion according to claim 9,
characterised in that

ricinus oil serves as adjuvant.

13. Emulsion according to claim 9,
characterised in that
a mixture of the mentioned oils in the effective ratio in the form of a twofold or threefold mixture serves as adjuvant.

14. Emulsion according to claim 1,
characterised in that
the composition of the water-salt medium contains sodium salts and potassium salts of chlorides and phosphates and also the monosaccharide mannitol in injection water.

15. Emulsion according to claim 1,
characterised in that
the concentration of the components in the water-salt medium has an osmotic pressure in the range of 100 - 350 mosmol/l.

16. Emulsion according to one of the claims 1 to 15,
characterised in that
the mean particle size does not exceed 0.2 μm and is in a range of 0.06 – 0.2 μm.

17. Method for producing a fluorocarbon emulsion which includes a homogenisation under high pressure,
characterised in that
it is implemented in a plurality of steps, namely a first step of producing a phospholipid dispersion in a water-salt medium, a second step of homogenisation of the fluorocarbon compounds in the phospholipid dispersion, a third step of heat sterilisation of the produced emulsion and a fourth step of subsequent storage of at least 6 months in the non-frozen state at a temperature of +4°C.

18. Method according to claim 17,
characterised in that
the phospholipid dispersion in the water-salt medium is produced by homogenisation at a high pressure of at least 100 atm with subsequent heat sterilisation.

19. Method according to claim 17,
characterised in that the fluorocarbon compounds in the phospholipid dispersion are homogenised at a pressure of 300 to 650 atm.

20. Method according to claim 17,
characterised in that
the phospholipid dispersion is sterilised at 100°C.

21. Method according to claim 17,
characterised in that
the fluorocarbon emulsion is sterilised at 100°C.